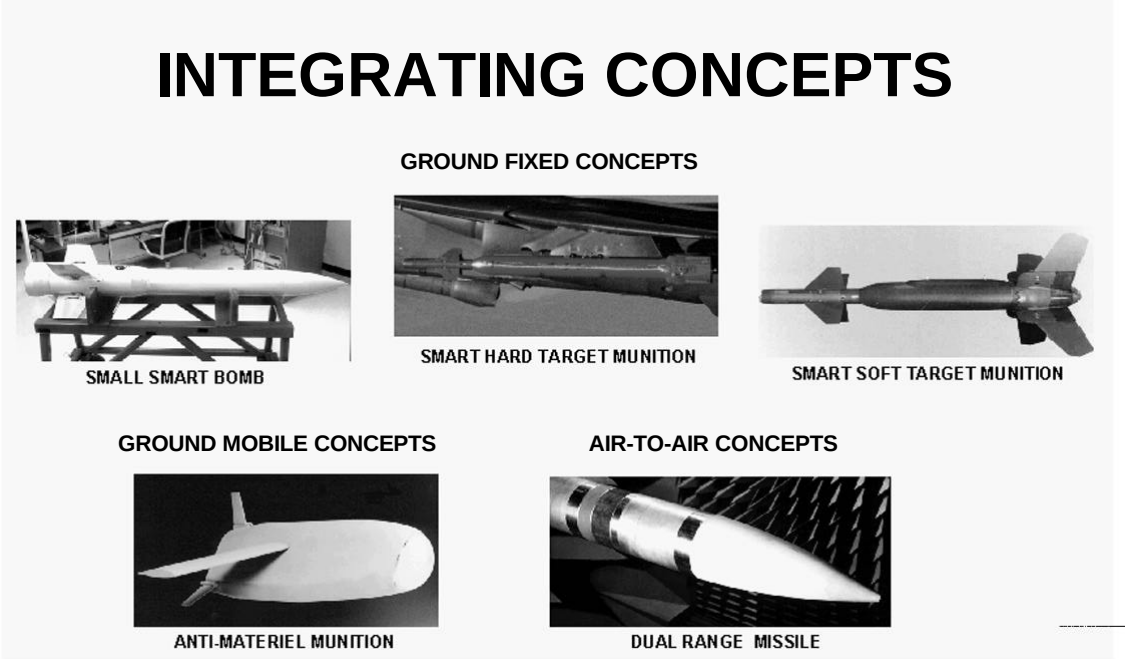
CONVENTIONAL ARMAMENT



VISIONS AND OPPORTUNITIES

With resources shrinking, both in terms of funding and manpower, the Air Force must perform a complicated balancing act in order to satisfy its current and future weapon system needs. Today, weapon systems must be developed and maintained at lower costs, be robust to future threats, and be incrementally modernized through planned upgrades. The Armament Directorate is committed to providing the research and development efforts necessary to meet the conventional weaponry needs of the Air Force while maintaining this balance.

Our vision is to pursue the development of precision guided conventional weapons that are versatile, affordable, autonomous, and provide greater lethality in all-weather conditions. These weapons will enable our forces to target and surgically strike a wide variety of military targets while reducing the risk to civilian populations and minimizing environmental damage. We envision conventional weapons that will be able to defeat targets that were once only defeated by the use of nuclear weapons.

The Armament Directorate and its associated technology thrust leaders are using the idea of "Integrating Concepts" as the organizing principle to focus its technical planning activities. The five Integrating Concepts used at the present time are depicted in the above graphic: one focuses on mobile surface targets (the Antimateriel Munition); one focuses on airborne targets (the Dual Range Missile); and the remaining three focus on fixed surface targets (Small Smart Bomb, Smart Hard Target Munition, Smart Soft Target Munition). To promote efficient integrated planning, the concepts are managed by an interdisciplinary Integrated Product Team (IPT). Each concept facilitates a system-based approach rather

than a series of independent component or technology based approaches. The Integrating Concept IPT (ICIPT) will establish long-term visions, operational performance goals, and technology subgoals within the context of their particular munition system and its mission application. Ultimately, the various technology programs described in this Technology Area Plan were selected because their successful execution will provide technology options for the long-term visions of these Integrating Concepts.

Technology innovation is encouraged in this planning cycle. Senior planners are promoting revolutionary thinking to achieve paradigm shifting solutions to operational deficiencies. AFMC/ST has earmarked funds to be dedicated to those promising ideas which emerge from the Air Force Scientific Advisory Board's New World Vistas or other far thinking efforts such as Air Force 2025. The visions and performance attributes of the five Integrating Concepts will be the guiding force in selecting those programs to fund. Second, the corporate Air Force has shown an accelerated interest in Unmanned Aerial Vehicles (UAVs). Two of the munition Integrating Concepts (the Small Smart Bomb and Antimateriel Munition) will enable small UAVs to embody a lethal mission. Component technologies presently being driven by the need for compact, inexpensive munitions can be applied in innovative ways to facilitate compact, high endurance, highly capable UAVs. Some technology examples are the Conformal Array Antenna, AntiJam GPS, Laser Radar Imaging, and Multi-Munition Transceivers.

It will be the goal of the individual thrusts to use the visions of the ICIPTs, the revolutionary ideas of the New World Vistas, and the far thinking ideas of the AF 2025 and make them reality. They will furnish the necessary technical knowledge and facilities to turn the seekers, sensors, fuzes, and ordnance research into hardware that the warfighter can use to meet the future air-to-surface and air-to-air conventional weapon needs of the Air Force.

The development of highly effective and affordable conventional armament technologies for the Air Force is our vision. By working together with the system program offices and Air Force Test ranges located at Eglin AFB, the munition technology development, system acquisition, and testing that is critical to the Air Force will be developed and maintained to meet our current and future munition needs.

This plan has been reviewed by all Air Force laboratory commanders/directors and reflects integrated Air Force technology planning. I request Air Force Acquisition Executive approval of the plan.

SIGNED

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SIGNED

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